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What is claimed is:

1. An *in vitro* system for identifying agents capable of inhibiting or preventing oxidative damage comprising:
  - a mouse fibroblast culture derived from a transgenic mouse capable of expressing human-elastin promoter; and
  - a means for generating reactive oxygen species within the mouse fibroblast culture.
2. A method for identifying agents capable of inhibiting or preventing oxidative damage comprising:
  - adding a test agent suspected of providing protection against oxidative damage to a mouse fibroblast culture derived from a transgenic mouse capable of expressing human elastin promoter;
  - adding a means for generation of reactive oxygen species to the mouse fibroblast culture;
  - determining human elastin promoter activity in the mouse fibroblast culture exposed to the test agent after a selected time period; and
  - comparing the determined human elastin promoter activity in the mouse fibroblast culture exposed to the test agent to human elastin promoter activity in a control fibroblast culture wherein a decrease in the determined human elastin promoter activity is indicative of the test agent inhibiting or preventing oxidative damage.